

AMENDMENTS TO THE CLAIMS

This listing of claims includes a complete listing of both allowed claims and amended claims and will replace all prior versions, and listings, of claims in the application.

1. (Cancelled).
2. (Currently Amended) A computer-readable medium having computer-executable instructions to cause a computing system to perform a method comprising:
 - creating a data table in a server database;
 - creating a workflow table as part of a database schema in the server database, the workflow table is associated with the data table, each row in the workflow table represents a workflow step invokable by workflow events that include at least one timeout event, the workflow step containing workflow events that include at least one timeout event, workflow rules and associated code defined by script functions;
 - receiving a data modification request in the server database;
 - invoking a workflow engine using server database triggers; ~~and~~
 - evaluating a condition and executing an action for at least one workflow step[[]]; and scanning all databases on the server for timeout workflow events and executing the timeout workflow events as due using a timeout agent.
3. (Previously presented) The method of claim 2, evaluating a condition and executing an action for at least one workflow step includes using a script engine which is invoked by the workflow engine.

4. (Currently amended) A workflow system comprising:
 - a server database that includes a data table and an associated workflow table, the data table includes workflow triggers, the workflow table comprises at least part of an extended database schema and includes a plurality of workflow steps triggerable by at least one workflow event that comprises a timeout event;
 - a workflow extended store coupled to the server database and to the workflow triggers, the workflow triggers invoke the workflow extended store;
 - a workflow engine coupled to the server database and to the workflow extended store;
 - a timeout agent that scans all databases on the server and executes timeout events as due;and
 - a script engine coupled to the workflow engine.
5. (Previously presented) The workflow system of claim 4, the workflow table is communicatively coupled to the workflow engine.
6. (Previously presented) The workflow system of claim 4, each column in the data table comprises a workflow state.
7. (Previously presented) The workflow system of claim 4, each row in the workflow table comprises a workflow step.
8. (Previously presented) The workflow system of claim 4, the workflow table comprises a set of workflow rules and associated code to be executed by the workflow engine, a workflow table is defined for each data table that needs to enforce integrity of data changes.
9. (Previously presented) The workflow system of claim 4, the extended store comprises a data set having the necessary information to enforce a workflow step.
10. (Previously presented) The workflow system of claim 4, the workflow engine receives information on a workflow event from the extended store and maps the information against a cached copy of the workflow table and executes an appropriate workflow step.

11. (Currently amended) A workflow system comprising:
 - a server database that includes a workflow enabled data table and an associated workflow table, the workflow table is part of an extended database schema, each row in the workflow table comprises a workflow step triggered by a workflow event comprising at least a timeout event, and the workflow enabled data table includes workflow triggers;
 - a workflow extended store coupled to the server database, where data modifications submitted to the workflow enabled data table invokes the workflow extended store;
 - a workflow engine coupled to the server database, to the workflow extended store, and to the workflow table;
 - a timeout agent that scans all databases on the server for timeout events and executes the timeout events as due; and
 - a script engine coupled to the workflow engine.
12. (Previously presented) The workflow system of claim 11, the workflow event selected from the group comprising state events and transition events.
13. (Previously presented) The workflow system of claim 12, a state event is associated with a single workflow state and is executed every time the event associated with the workflow state is triggered.
14. (Previously presented) The workflow system of claim 13, the execution of a state event depends on how a workflow state is entered or exited.
15. (Previously presented) The workflow system of claim 12, a transition event is associated with a change from a current workflow state to a new workflow state, the current and the new workflow states are defined by a transition workflow step, and the transition event is executed upon a requested state transition where the current and the new workflow state match the transition workflow step.

16. (Previously presented) The workflow system of claim 11, the timeout event is associated with a timeout job, the timeout event can be either a state event or a transition event, and the timeout event is triggered by the timeout job.
17. (Previously presented) A workflow system comprising:
a server database that includes a data table and an associated workflow table, the workflow table is included in a database schema, each row in the workflow table comprises a workflow step, and the system further includes workflow triggers defined on the data table;
a workflow extended store communicatively coupled to the server database, the workflow triggers analyze a data modification request submitted to the data table and invoke the extended store;
a timeout agent implemented as a server job, the timeout agent scheduled to run with a definable frequency, and the timeout agent scans the server database and executes a timeout workflow event when the database indicates such a timeout workflow event is due;
a workflow engine communicatively coupled to the server database, to the workflow extended store, and to the workflow table; and
a script engine communicatively coupled to the workflow engine.
18. (Cancelled).
19. (Previously presented) The workflow system of claim 17, further includes a session object communicatively coupled to the server database, the session object comprises a set of properties for a workflow event, a set of data on the current user, a database user list, and a data set of user permission.
20. (Previously presented) The workflow system of claim 19, further includes a number of workflow support functions which operate in conjunction with the session object and implement a number of workflow tasks including sending email and finding a user's manager.
21. (Cancelled).

22. (Previously presented) The workflow system of claim 17, the timeout agent performs an update in the data table and triggers an association workflow action upon timeout workflow events which define a state transition.

23. (Currently amended) A computing method comprising:

creating a data table in a server database;

creating a workflow table as part of an extended database schema in the server database, the workflow table is associated with the data table, each row in the workflow table represents a workflow step that includes at least one timeout event associated with a timeout job, the timeout event including a state event and a transition event, the timeout event triggered by the timeout job;

receiving a data modification request in the server database;

invoking a workflow engine using server database triggers; ~~and~~

evaluating a condition and executing an action for each workflow step using a script engine which is invoked by the workflow engine[.]; and

scanning all databases on the server for timeout workflow events and executing the timeout workflow events as due using a timeout agent.

24. (Previously presented) The method of claim 23, invoking the workflow engine includes comparing the data modification request with a workflow definition in the workflow table and determining the appropriate workflow step to be executed.

25. (Previously presented) The method of claim 23, evaluating a condition and executing an action for each workflow step includes checking execution permissions on each workflow step.

26. (Previously presented) The method of claim 23, creating a workflow table with each row in the workflow table representing a workflow step includes defining a condition and an action for each workflow step using script functions.

27. (Cancelled).

28. (Previously presented) The method of claim 23, evaluating a condition and executing an action for each workflow step includes committing the data modification request to the data table in the server database.

29. (Currently amended) A computer comprising:

a processor;

a computer-readable medium;

a server database having a workflow enabled data table and an associated workflow table, the workflow enabled data table includes workflow triggers, each workflow trigger instigated by at least one workflow event that includes a timeout event, the timeout event associated with [[at]] a timeout job that instigates the workflow trigger, the workflow table comprises at least part of an extended database schema;

a workflow extended store coupled to the server database and the workflow triggers;

a workflow engine coupled to the server database and to the workflow extended store;

a timeout agent that scans all databases on the server for timeout events and executes timeout events as due; and

a script engine coupled to the workflow engine.

30-39. (Cancelled).